

Incorporating Sustainability in the US Environmental Protection Agency

Remarks to the NRC Committee

Paul T. Anastas

December 14, 2010

“... Environmental challenges do not obey bright lines or numerical limits. They are not constrained by disciplinary boundaries or the boxed walls of an organizational chart.”



*Administrator Lisa P. Jackson,
Remarks to the NAS,
November 30, 2010*

1. Achieve environmental protection, economic growth, and societal health synergistically
2. Incorporate environmental justice into all of our work
3. Ensure the protection of disproportionately impacted communities and vulnerable populations
4. Design our efforts to protect human health and the environment in a way that prevents unintended consequences

What's being done:

- Academic work: 25 years worth of sustainability science
- Private and non-governmental work: national and international sustainability efforts
- Government work: Excellent individual programs that have not been applied systematically.

“What I am announcing today is not an initiative, program, or project. It is the beginning of a new approach. It is a step toward the more effective pursuit of all of our work, including our statutory requirements, by incorporating sustainability into our foundations.”

*Administrator Lisa P. Jackson,
Remarks to the NAS,
November 30, 2010*

The Charge:

“The U.S. Environmental Protection Agency’s Office of Research and Development (ORD) has been working to create programs and examining applications in a variety of areas in order to better incorporate sustainability. To further strengthen the analytic and scientific basis for sustainability as it applies to human health and environmental protection, an ad hoc committee under the Science and Technology for Sustainability Program (STS) will conduct a study and prepare a report that will answer the following questions:



What should be the operational framework for sustainability for EPA?

- How can the EPA decision making process rooted in the risk assessment/risk management (RA/RM) paradigm be integrated into this new sustainability framework?
- What scientific and analytical tools are needed to support the framework?
- What expertise is needed to support the framework?”

Does EPA wish to incorporate sustainability into ALL of its actions?

Yes. EPA is seeking to take on a systems approach to “all of our work, including our statutory requirements.”

But... we must do so appropriately and within the scope of our responsibilities as a government agency.

The Red Book Analogy:

- **Set an underlying framework**
- **Codified risk**
- **Built on existing literature and programs**
- **Evolved over time**



Defining Sustainability

The Brundtland Definition

“Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.”

- What are the **critical elements** of a sustainability determination?
- How do we draw **system boundaries** when conducting a sustainability analysis?
- How do we move from reductionist analyses to **integrative analyses**?
- What are the **existing frameworks** for sustainability from which insights may be extracted?
- What are the **subcomponents** of sustainability?

A sustainability framework needs to be straightforward, concise, and intuitive.